



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,629	12/01/2003	Pierre Beauparlant	9988-012-999	4706
20583	7590	08/12/2005	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			BALASUBRAMANIAN, VENKATARAMAN	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/725,629

**Applicant(s)**

BEAUPARLANT ET AL.

**Examiner**

Venkataraman Balasubramanian

**Art Unit**

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-103 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

Claims 1-103 are present.

#### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein A, B, D are nitrogen and E is CR<sub>6</sub> or B, D, E are nitrogen and A is CR<sub>3</sub>, namely tricyclic 1,2,3-triazine, composition, and various method of uses.

Group II claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein A, B, E are nitrogen and D is CR<sub>5</sub> or E, D, A are nitrogen and B is CR<sub>4</sub>, namely tricyclic 1,2,4-triazine, composition, and various method of uses.

Group III, claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein A, B, are nitrogen, D is CR<sub>5</sub>, E is CR<sub>6</sub> or D, E are nitrogen, A is CR<sub>3</sub>, B is CR<sub>4</sub>, namely tricyclic pyridazine, composition, and various method of uses.

Group IV, claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein A, D, are

Art Unit: 1624

nitrogen, B is CR<sub>4</sub>, E is CR<sub>6</sub> or B, E are nitrogen, A is CR<sub>3</sub>, D is CR<sub>5</sub>, namely tricyclicpyrimidine, composition, and various method of uses.

Group V, claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein A, E are nitrogen, B is CR<sub>4</sub>, and D is CR<sub>5</sub>, namely tricyclicpyrazine, composition, and various method of uses.

Group VI, claim(s) 1-8, 10-12, 14-17, 19-21, 23-26, 28-30, 32-35, 37-73, 75-78, 80-82, 84-87 and 89-103, drawn to compound of formula I, II, III, IV wherein one of A, B, D, E are nitrogen and the others CR<sub>3</sub>, CR<sub>4</sub>, CR<sub>5</sub> or CR<sub>6</sub>, namely tricyclicpyridine, composition, and various method of uses.

Group VII, claim(s) 1-103, drawn to compound of formula I, II, III, IV wherein A, B, D and E are CR<sub>3</sub>, CR<sub>4</sub>, CR<sub>5</sub>, CR<sub>6</sub> respectively, namely phenanthrene, composition, and various method of uses.

The inventions listed as Groups I, II, III, IV, V, VI, VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Where there is lack of unity the requirement for restriction is proper- See MPEP 803.02. The requirement for unity of invention is two-fold: (1) common utility and (2) sharing a substantial structural feature disclosed as being essential to the utility. Both these conditions are to be met with. Instant claims do not meet both these conditions.

Invention I, II, III, IV, V, VI and VII are independent and distinct from each other because they are directed to structurally dissimilar compounds that lack common core,

Art Unit: 1624

namely, tricyclic 1,2,3-triazine versus tricyclic 1,2,4-triazine, versus tricyclic pyridazine, versus tricyclic pyrimidine, versus tricyclic pyrazine, versus tricyclic pyridine versus tricyclic phenanthrene compound. Consequently, the groups require separate prior art searches. They can be made and used independently. Art which may render obvious or anticipate one of the groups would not necessarily do the same for the other group. For example prior art cited in the International Search Report and the Information Disclosure Statement may not be applicable to all the above groups. Each can support a patent as the compounds of each group are capable of being utilized alone not in combination with other members listed in the Markush group.

Except for the C=C group in third ring and a C= in second ring, every ring and substituents in the tricyclic core is varied and it cannot be said that these C=C or C= core essentially contributes utility recited in the claims. Thus the common structural feature essential for the said utility is not met with.

In addition, common utility requirement is also not met with as evident from the claims that these compounds can be used as anticancer agent and antifungal agents etc. In addition, prior art cited in the Information Disclosure Statement and International search report clearly states other uses for the instant compounds. Thus, both the criteria set forth for unity of invention is not met with.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the

Art Unit: 1624

prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

In view of distinct nature of each of the invention, the restriction is set forth in writing.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### **Conclusion**

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Acting Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is (571) 272-0674.

The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status

Art Unit: 1624

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

*Venkataraman Balasubramanian*  
Venkataraman Balasubramanian

8/10/2005